

CONSTRUCTION ENGINEERING

The Standard Specifications are revised as follows:

SECTION 105, BEGIN LINE 189, INSERT AS FOLLOWS:

The Contractor shall be responsible for the accuracy of transfer from the control lines and grades and layout of the work. *The Contractor shall notify the Engineer and the District Traffic Section to locate all existing underground traffic signal and lighting wiring. The District Traffic Section will only perform this locate service once per construction season per contract.* The Contractor shall also be responsible for the preservation of all stakes and marks. If the construction stakes or marks are carelessly or willfully destroyed or disturbed by the Contractor or its employees, the cost to the Department for replacing them will be charged against the Contractor. Such costs will be deducted from payment for the work.

SECTION 105, BEGIN LINE 207, INSERT AS FOLLOWS:

(b) Construction Engineering by the Contractor. If set out as a pay item, the construction engineering, including all staking and layout usually done by the Department, shall be performed by the Contractor. Construction engineering shall include re-establishing the survey points and survey centerlines; referencing the necessary control points; running a level circuit to check or re-establish plan bench marks; running a level circuit to establish elevations on new bench mark tablets; setting stakes for right-of-way, culverts, slopes, subbase, ~~subsurface~~ underdrains, paving, subgrade, bridge piers, abutments, and all other stakes required for control lines and grades; and setting vertical control elevations, such as footings, caps, bridge seats, and screed elevations. *Construction engineering shall also include documenting the underground wiring as located by the District Traffic Section.*

The Contractor, shall notify the District Traffic Section to locate all existing underground traffic signal and lighting wiring. The District Traffic Section will only perform this locate service once per construction season per contract. The required documentation shall be performed and a copy provided to the Engineer as soon as practical after the locations have been marked. Documentation which is not provided to the Engineer in a timely manner shall not be considered valid for the purpose of resolving conflicts related to the accuracy of the location markings. The documentation may be digital pictures, regular photos, or sketches of the areas marked. The documentation shall be such that the underground wiring can be easily and accurately re-established in the field by the Contractor, if needed.

A complete cross section shall be taken at each 150 m (500 ft) interval. Horizontal control shall be checked at the beginning and ending of the mainline and all "S" lines. This information shall be used to verify that the planned alignment and elevations will match existing conditions. Required alignments and
